Library

RURAL DISTRICT OF WAYLAND

THE
ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
TOGETHER WITH
THE
REPORTS
OF THE
PUBLIC HEALTH INSPECTORS
AND
WATERWORKS ENGINEER

1957.

STAFF.

Medical Officer of Health:

ROBERT H. C. McCURDY

M.B., Ch.B., D.P.H.

Public Health Inspector and Inspector under Petroleum Acts:

A.T. BOORE

M.R.S.H., M.A.P.H.I.

(Also holds the Certificate for the Inspection of Meat and other Foods).

Additional Public Health Inspector:

A. E. SHELDRAKE

M.A.P.H.I.

Pupil Public Health Inspector:

A. G. WEBSTER

Chief Waterworks Engineer:

M.G.M. SHORT

A.I.W.E.

Committees concerned with matters of Public Health:

WATER AND SEWERAGE COMMITTEE.

PUBLIC HEALTH COMMITTEE.

HOUSING COMMITTEE.

GENERAL STATISTICS.

Area in acres	106,881
Population (estimated at mid year by Registrar General)...	19,740
Number of inhabited houses	6,044
Rateable Value	£133,901
Product of 1d. Rate	£506

Mr. Chairman, My Lords, Ladies and Gentlemen,

I have the honour to submit my Annual Report for the year 1957.

A number of favourable trends occurred during the year in the health of the District. The Birthrate increased slightly to 16.3 per thousand of the population, remaining slightly above the national rate of 16.1. There was one death from tuberculosis, but the number of fresh cases of tuberculosis notified was the lowest since before 1946.

The Deathrate fell to 9.8 per thousand of the population, well below the national rate of 11.5. On the other hand, the number of stillbirths remained high for the second year running and the number of infant deaths rose from 2 in 1956 to 11.

Epidemics of whooping cough and measles occurred during the year. Of the two cases of poliomyelotis notified, one was paralytic and the other was non-paralytic.

Salmonella typhimurium was isolated from one of the **five** notified cases of dysentery.

The case of encephalitis was due to a virus and that of meningitis was not confirmed.

Milk and Dairies Regulations 1949, Regulation 20.

At the beginning of the year restrictions were in force on the sale of milk found to be infected with tubercle bacilli from nine herds. During the year restrictions were placed on the sale of milk from a further five herds for the same reasons and they were lifted from five herds.

Food Poisoning.

Two cases of food poisoning were notified, but the cause was not ascertained.

MEDICAL STATISTICS.

BIRTHS.

	Male.	Female.	Total.
Live Births	162	159	321
Stillbirths	6	8	14

POPULATION AT MID-YEAR, BIRTHS, BIRTHRATE, STILLBIRTHS, STILLBIRTH RATES DURING THE PAST FIVE YEARS.

	1953.	1954.	1955.	1956.	1957.
Population	19,230	20,400	20,000	19,740	19,740
Births	321	309	306	315	321
Birthrate per 1000 of population	16.7	15.1	15.3	15.9	16.3
Stillbirths	9	4	9	15	14
Stillbirth rate per 1000 of population	0.47	0.19	0.45	0.76	0.71
Stillbirth rate per 1000 total births	27.3	12.8	28.6	45.45	41.8

DEATHS

	Male	Female	Total
All ages	98	95	193
Infants under 1 year	3	8	11

CAUSES OF DEATH OF INFANTS UNDER 1 YEAR.

Cause	Male	Female	Total
Prematurity	1	6	7
Haemolytic disease of the newborn	1	0	1
Congenital neoplasm	1	0	1
Bronchitis	0	1	1
Birth injury	0	1	1

POPULATION AT MID-YEAR, DEATHS, DEATHRATE, INFANT DEATHS AND INFANT MORTALITY RATE, DURING THE PAST FIVE YEARS.

	1953.	1954.	1955.	1956.	1957.
Population	19,230	20,400	20,000	19,740	19,740
Deaths	178	189	197	219	193
Deathrate per 1000 of population	9.3.	9.3	9.8	11.1	9.8
Infant Deaths	12	5	6	2	11
Infant Mortality Rate per 1000 ... Live Births	37.4	15.9	19.6	6.35	34.3

DEATHS FROM CERTAIN SELECTED CAUSES DURING THE PAST FIVE YEARS.

Cause	1953.	1954.	1955.	1956.	1957.
Tuberculosis	1	5	1	0	1
Bronchitis and Pneumonia ...	11	12	14	14	19
Other Notifiable Infectious Diseases	0	0	0	0	0
Motor Vehicle and other accidents	7	10	7	6	10
Pregnancy,Childbirth and Abortion	0	0	0	1	0
Cancer, of lung and bronchus	2	1	5	11	2
Cancer, other sites	27	27	22	29	30

DEATH ACCORDING TO AGES (Compiled from Returns submitted by the District Registrar).

Age Group.	Male.	Female.	Total.
Under 1 Year	3	8	11
1 and under 5	1	0	1
5 " " 10	0	0	0
10 " " 20	2	1	3
20 " " 30	5	1	6
30 " " 40	1	1	2
40 " " 50	2	1	3
50 " " 60	9	6	15
60 " " 70	20	14	34
70 " " 80	37	31	68
80 " " 90	16	26	42
90 and over	2	6	8
Totals	98	95	193

CAUSES OF DEATH AT AGES ABOVE 1 YEAR AND BELOW 50.

Age Group.	Cause.	Male.	Female.	Total.
1 to 5	Road Accident.	1	0	1
10 to 20	Tuberculosis	0	1	1
	Accident	2	0	2
20 to 30	Pneumonia	1	1	2
	Accident	3	0	3
	Suicide	1	0	1
30 to 40	Suicide	1	1	2
40 to 50	Cancer of Oesophagus	1	0	1
	Heart Disease	1	1	2

DEATHS FROM ALL CUASES (Registrar General's Short List).

List No.	Cause.	Male.	Female.	Total.
1	Tuberculosis, respiratory	0	0	0
2	Tuberculosis, other	0	1	1
3	Syphilitic disease	1	0	1
4	Diphtheria	0	0	0
5	Whooping Cough	0	0	0
6	Meningococcal infections	0	0	0
7	Acute Poliomyelitis	0	0	0
8	Measles	0	0	0
9	Other infective and parasitic Diseases	0	0	0
10	Malignant neoplasm,stomach	2	1	3
11	Malignant neoplasm,lung bronchus	2	0	2
12	Malignant neoplasm,breast	0	6	6
13	Malignant neoplasm,uterus	0	1	1
14	Other malignant and lymphatic neoplasms	11	9	20
15	Leukaemia, aleukaemia	1	1	2
16	Diabetes	0	3	3
17	Vascular lesions of nervous system	14	9	23
18	Coronary disease, angina	9	14	23
19	Hypertension with heart disease	3	0	3
20	Other heart disease	10	12	22
21	Other circulatory disease	6	9	15
22	Influenza	1	1	2
23	Pneumonia	9	4	13

DEATH FROM ALL CAUSES (Continued)

List No.	Cause.	Male.	Female.	Total.
24	Bronchitis	2	4	6
25	Other diseases of respiratory system	2	1	3
26	Ulcer of stomach and duodenum	1	0	1
27	Gastritis, enteritis and diarrhoea	0	0	0
28	Nephritis and nephrosis	0	0	0
29	Hyperplasia of prostate	1	0	1
30	Pregnancy, childbirth, abortion	0	0	0
31	Congenital malformations	0	0	0
32	Other defined and ill-defined diseases	12	17	29
33	Motor Vehicle accidents	5	0	5
34	All other accidents	4	1	5
35	Suicide	2	1	3
36	Homicide and operations of war	0	0	0
	All causes	98	95	193

THE FOLLOWING TABLE COMPARES BIRTHRATES, DEATHRATES &C. OF THIS DISTRICT WITH THOSE OF ENGLAND AND WALES AND OF THE ADMINISTRATIVE COUNTY OF NORFOLK IN 1957.

	England and Wales.	Norfolk.	District.
Birthrate	16.1	15.4	16.3
Stillbirth rate per 1000 total births	22.4	22.5	41.8
Deathrate	11.5	11.7	9.8
Infant mortality rate per 1000 live births	23.0	22.5	34.3
Tuberculosis deathrate per 1000 population	0.11	0.07	0.05
Lung Cancer deathrate per 1000 population	0.43.	0.29	0.10

INFECTIOUS DISEASES NOTIFIED DURING THE LAST FIVE YEARS.

	1953.	1954.	1955.	1956.	1957.
Tuberculosis, all sites	15	10	18	8	7
Scarlet fever	22	3	6	4	6
Whooping Cough	98	73	88	46	118
Erysipelas	3	0	3	0	1
Dysentery	5	2	14	2	5
Measles	390	335	18	207	323
Poliomyelitis	5	11	3	0	2
Pneumonia	7	24	13	19	16
Puerperal pyrexia	0	1	1	0	0
Food poisoning	5	4	0	0	2
Infectious jaundice	3	7	2	1	4
Meningitis	1	0	1	0	2
Encephalitis	1	0	0	0	1

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b30240955

INFECTIOUS DISEASES NOTIFIED IN 1957.
ACCORDING TO PARISHES.

	Tuberculosis, all sites.	Scarlet fever.	Whooping Cough.	Erysipelas.	Dysentery.	Measles.	Poliomyelitis.	Pneumonia.	Food Poisoning.	Infectious jaundice.	Meningitis.	Encephalitis.
Attleborough	2	2	6	0	1	88	0	4	0	0	1	0
Banham	0	0	0	0	0	7	0	1	0	0	0	0
Besthorpe	1	4	0	0	0	2	0	2	0	0	0	0
Blo'Norton	0	0	0	0	0	1	0	0	0	0	1	0
Brettenham	0	0	0	0	0	3	0	0	0	0	0	0
Bridgham	0	0	17	0	0	11	0	0	1	0	0	0
Buckenham New	0	0	1	0	0	3	0	0	0	0	0	0
Buckenham Old	0	0	0	0	0	22	0	2	0	0	0	0
Carbrooke	0	0	2	0	0	4	0	0	0	0	0	0
Caston	0	0	1	1	0	0	0	0	0	0	0	0
Croxton	0	0	0	0	0	19	0	0	0	0	0	0
Eccles	0	0	0	0	0	10	0	0	0	0	0	0
Ellingham Great	0	0	6	0	0	11	0	1	0	0	0	0
Ellingham Little	1	0	10	0	0	0	1	0	0	0	0	0
Garboldisham	0	0	0	0	4	3	0	0	0	0	0	1
Griston	0	0	5	0	0	1	0	0	0	0	0	0
Harling	0	0	22	0	0	49	0	2	0	1	0	0
Hockham	0	0	0	0	0	3	0	0	0	0	0	0
Kenninghall	0	0	0	0	0	1	0	0	0	0	0	0
Kilverstone	0	0	1	0	0	23	0	0	0	0	0	0
Lopham North	0	0	1	0	0	1	0	0	0	0	0	0
Lopham South	0	0	0	0	0	2	0	0	0	0	0	0
Merton	1	0	4	0	0	0	0	0	0	0	0	0
Ovington	1	0	1	0	0	0	0	0	0	0	0	0
Riddlesworth	0	0	0	0	0	9	0	0	0	0	0	0
Rocklands	0	0	9	0	0	5	1	2	0	0	0	0
Roudham	0	0	4	0	0	2	0	1	1	0	0	0
Scoulton	0	0	0	0	0	4	0	0	0	0	0	0
Shropham	0	0	0	0	0	8	0	0	0	0	0	0
Snetterton	0	0	0	0	0	7	0	0	0	1	0	0
Stow Bedon	0	0	7	0	0	1	0	0	0	0	0	0
Thompson	0	0	13	0	0	0	0	0	0	0	0	0
Tottingham	0	0	0	0	0	0	0	0	0	0	0	0
Watton	1	0	7	0	0	19	0	0	0	2	0	0
Wretham	0	0	1	0	0	4	0	1	0	0	0	0
Totals	7	6	118	1	5	323	2	16	2	4	2	1

THE FOLLOWING TABLE SHOWS THE NUMBER OF CASES ON THE TUBERCULOSIS REGISTER AT 31ST. DECEMBER, 1957, COMPARED WITH 31ST. DECEMBER, 1956.

	Pulmonary.			Non-Pulmonary.			
	Male.	Female.	Total.	Male.	Female.	Total.	Grand Total.
31.12.56	46.	39.	85.	30.	22.	52.	137.
31.12.57	46.	44.	90.	30.	22.	52.	142.

I should like to thank the Chairman and Members of the Council, and my colleagues on the Staff, for their continued support and help during the year.

I have the honour to be,
Your obedient Servant,

ROBERT N. C. McCURDY,

Medical Officer of Health.

REPORT OF PUBLIC HEALTH INSPECTOR

FOR THE YEAR 1957.

Mr. Chairman, My Lords, Ladies and Gentlemen,

I have the honour to present my seventh Annual Report in respect of the year 1957, a year in which the demands of the meat inspection service imposed an almost impossible burden on the staff, particularly at week-ends.

This is borne out by the records of animals inspected over the past few years which show that in 1954 the total was 10,619, in 1955 it was 19,823, and in 1956, 20,618 whereas in the year under review the figure had risen to 38,029.

It is, I feel, inevitable that in the not too distant future this problem, which is a very serious one throughout the country (particularly in districts where there is no staff for this duty only) will bring about a breakdown in the meat inspection service and result in a more acute shortage of recruits coming forward for training in the Public Health Service.

The conflict between the demands of the meat trade (which result in increased throughput at weekends) and the anxiety on the part of Local Authorities to provide a comprehensive inspection service at reasonable hours without undue burden on its officers, appears to be incapable of settlement under the provisions of existing legislation.

It must be pointed out that there is an ever-increasing desire for an inspection service in the meat trade generally and I am convinced that by a revision of times of killing, the provision of additional cold storage accommodation and the arrangement of live-stock sales to fit the circumstances the abolition of Sunday slaughtering could be brought about without disastrous consequences.

The most serious aspect of this matter is that detailed coverage of the wide range of duties, statutory and otherwise, which come within the purview of the Public Health Department, is restricted by the heavy committments in connection with meat inspection.

Never-the-less it is gratifying to report, as in previous years, that it has been possible to continue to give attention to matters arising from day to day.

FOOD

(a) Meat.

During the year 1360 inspection visits have been made, over one quarter of them outside normal working hours.

Six slaughterhouses were in regular use and the following carcases were inspected :-

Cattle	Sheep	Calves	Pigs	Total
1484	2535	378	33,632	38,029

Condemnations were as follows:-

Meat	Offals
21,330 lbs.	16,384 lbs.

The slashing and staining of condemned meat has continued and disposal by steam digestion in approved plants is still permitted.

No evidence was found of either Cisticercosis or disease notifiable under the Diseases of Animals Acts during the year.

The construction of the private abattoir at Watton was completed and it came into use early in the year. It is well equipped with modern plant and adequate cold storage accommodation. A poultry dressing establishment has also been provided, on the same site.

The transport of meat is carried out by modern vehicles operated by the owner of the abattoir.

(b) Other Foods

Over one hundred pounds of miscellaneous foodstuffs were condemned as being unfit for human consumption at various food premises.

(c) Food Premises

The following table shows the number of food premises in the District by type of premises :-

Restaurants Cafes and Canteens.	Hotels Guest Houses Public Houses and Clubs.	Butchers	Bakers	Fish Poultry and Fried Fish.	Greengrocery General Stores Confectioners
12	84	17	18	13	96

In addition 52 premises are registered under Section 16 of the Food and Drugs Act 1955, 23 persons are registered as Distributors of Milk under the Milk and Dairies Regulations and 27 licenced as Dealers under the Milk (Special Designation) Regulations.

During the year 173 visits were made to these premises principally in connection with the provisions of the Food Hygiene Regulations.

Again this year it has not proved possible to carry out a complete, detailed survey of premises under the Regulations but again much has been accomplished in the field by informal contact, lectures to various organisations and increasingly by the public in their tendency to trade where they know hygienic methods are adopted.

WATER SUPPLIES

Further justification of the Councils policy, from the Public Health standpoint, in providing a piped water supply for practically the whole of the District, has again this year been illustrated by the fact that of 21 shallow well supplies sampled only 2 were classified as "satisfactory." Five of the unsatisfactory wells were closed and connections made to the Council's mains. In eleven others remedial works to wells proved effective and in the remaining 3 cases remedial works were in hand at the end of the year.

POLLUTION OF RIVERS

Early in the year it was decided that an attempt should be made to bring back into operation the Attleborough Sewage Disposal Works which, except for the grit channel and sedimentation tanks, had been out of action for nearly 20 years.

Dredging operations carried out by the Drainage Board had reduced the level of the outfall stream and thus facilitated the flow of effluent from the works.

The sprinkler mechanism and filter beds were restored to operational condition and the works brought into full use in May at a cost of about £50.

The results of effluent tests became progessively better up to the end of the year and there was a very marked reduction in the amount of pollution entering the stream.

PUBLIC BATHING PLACES

Samples were taken at intervals during the summer from the swimming pool at Lech Neaton, Watton.

One sample revealed the presence of coliform organisms and, in consequence the pool was drained, cleaned and refilled.

Later samples gave satisfactory analysis results.

FOOD POISONING

Following an outbreak of food poisoning at a Norwich Hospital, 9 contacts were visited, specimens taken and necessary action taken in all cases.

INFECTIOUS DISEASES.

Fourteen cases of Infectious Disease were investigated, contacts notified and advice given as to prevention of spead of infection. Terminal fumigations were carried out in three instances following the removal of cases to hospital.

DISINFESTATION OF PREMISES

Two infestations of dwellings by cluster flies were dealth with during the year.

DRAINAGE OF PREMISES

New drainage work has been inspected tested and passed as satisfactory at 31 properties and in 22 of these cases preliminary assistance and advice was given in connection with the preparation of suitable schemes.

PUBLIC CLEANSING

The collection and disposal of refuse and night-soil has continued satisfactorily during the year.

The collection areas of both services were extended without additional labour or vehicles.

RODENT CONTROL

The report concerning this service is much as in previous years.

Co-operation from the public and the continued diligent, systetmatic ,operations by the control staff has produced satisfactory results throughout the year.

The threshing and dismantling of ricks was supervised wherever possible.

The following table shows the numbers of properties inspected and treated :-

Properties Inspected				Properties Treated			
L.A.	Dwelling Houses.	Business and Other.	Agricultural	L.A.	Dwelling Houses.	Business and Other.	Agricultural
29	3,895	426	229	18	2,678	70	41
Inspections carried out				Treatments carried out			
40	4,518	500	261	21	2,686	70	41

GENERAL

A total of 3,821 inspection visits were made during the year for all purposes.

Again this year it gives me the greatest possible pleasure to express my appreciation for the tolerance and consideration shown to me by the Council and its staff.

The unfailing loyalty and help of Mr. Sheldrake (the Additional Public Health Inspector) in particular and of the staff of the Public Health Department is deeply appreciated.

Senior Public Health Inspector.

WAYLAND RURAL DISTRICT COUNCIL

WATER DEPARTMENT.

REPORT OF THE WATERWORKS ENGINEER FOR THE YEAR

1957.

Mr. Chairman, My Lords, Ladies and Gentlemen,

I beg to submit my report for the year 1957.

The total amount of water raised during the year was 204,896,590 gallons.

Average daily consumption per head including trade use was 30 gallons per day.

371 premises and farms have during the year been connected to the mains.

The connections in each parish are as follows :-

	Domestic.	Meter.
Attleborough	850	112
Besthorpe	88	20
Banham	227	59
Blo'Norton	52	29
Brettenham	2	-
Bridgham	53	11
Buckenham New	116	12
Buckenham Old	232	57
Carbrooke	107	24
Caston	78	23
Croxton	64	10
Eccles/Hargham/Quidenham/Wilby	119	28
Ellingham Little	58	23
Ellingham Great	127	32
Garboldisham	133	35
Griston	38	9
Harling	266	36
Hockham	82	12
Kenninghall/Fersfield	210	49
Larling/Roudham	39	20
Lopham North	117	31
Lopham South	89	40
Merton	32	6
Morley	9	1
Ovington	33	13
Riddlesworth/Gasthorpe	26	4
Rockland	104	29
Scoulton	45	12
Shropham	46	12
Snetterton	25	3
Stow Bedon/Breckles	53	16
Thompson	63	8
Watton	576	61
Wretham	21	10
	4179	847

Main laying in Regional Water Supply Scheme Stages I, II and III has been completed, making a total of some 204 miles of mains.

All parishes in the Wayland Rural District have a piped water supply, with the exception of Kilverstone and Illington. These are being supplied by the owners from their own schemes.

The village in the Battle Training Area is not included in this scheme.

LINCOLNE SUTTON & WOOD

CLARENCE HOUSE,
6,CLARENCE ROAD,
NORWICH.

Cert.No: 953/H.
Lab.No: 4648, 4651/W.

2nd February,1957.

CERTIFICATE OF ANALYSIS OF WATER

Sample received 23rd January,1957 from Wayland R.D.C.

Marked - Watton Pumping Station and tap in chlorine house Watton W/wks.

Appearance when received - Clear.

Nature of deposit - Nil.

Colour. - Nil.

Odour - Nil.

Reaction - Neutral. pH.7.1

Taste - Satisfactory.

RESULTS OF CHEMICAL ANALYSIS IN PARTS PER MILLION

Ammoniacal nitrogen	- negligible trace	Hardness as $CaCO_3$:	
Albuminoid nitrogen	- 0.03	Total	- 360
Nitrate nitrogen	- 1.0	Carbonate (temporary)	- 295
Nitrite nitrogen	- Practically nil	Non-carbonate (permanent)	- 65
Chlorine as chlorides	- 28	Alkalinity as $CaCO_3$:	- 295

BACTERIOLOGICAL RESULTS

Number of colonies developing per ml. in 48 hrs at 37°C - Nil

Presumptive coliform organisms - Probable No. per 100 ml. - Nil
B. Coli Type 1 ("Faecal") ------

OPINION

The organic quality of this water is very good and its bacteriological condition is very satisfactory. The total hardness approximates to 25°Clark, and all but $4\frac{1}{2}$° of this is temporary and due to dissolved chalk. The reaction of the water is neutral. In our opinion this water is fit for drinking and general purposes.

(Signed) Lincolne Sutton & Wood.

LINCOLNE, SUTTON & WOOD.

CLARENCE HOUSE,
6, CLARENCE ROAD,
NORWICH.

Cert. No: 96.I
Lab. No: 5074/W

2nd May, 1957.

CERTIFICATE OF ANALYSIS OF WATER

Sample received 23rd April, 1957 from Wayland R.D.C.

Marked - P[illegible]ing Station, Old Buckenham.

Appearance when received - Clear; trace of white deposit.

Nature of deposit - Chalk.

Colour	- Nil.	Odour	- Nil.
Reaction	- Alkaline pH 8.8.	Taste	- Satisfactory.

RESULTS OF CHEMICAL ANALYSIS IN PARTS PER MILLION

Ammoniacal nitrogen	- 0.04	Hardness as $CaCO_3$:	
Albuminoid nitrogen	- 0.03	Total	- 120
Nitrate nitrogen	- nil	Carbonate (temporary)	- 55
Nitrite nitrogen	- 0.064	Non-carbonate (permanent)	- 65
Chlorine as chlorides	- 30	Alkalinity as $CaCO_3$	- 55

BACTERIOLOGICAL RESULTS

Number of colonies developing per ml. in 48 hrs at 37°C - 1

Presumptive coliform organisms - Probable No. per 100 ml. - nil

B. Coli type 1("Faecal") - -

OPINION

Both organically and bacteriologically, the quality of this water is very good. It has been partially softened, the total hardness being only $8\frac{1}{2}^{\circ}$ Clark, of which $4\frac{1}{2}^{\circ}$ is permanent. A very slight deposit of chalk was present in the sample. In our opinion this water is fit for drinking purposes.

(Signed) Lincolne, Sutton & Wood.

LINCOLNE SUTTON & WOOD.

CLARENCE HOUSE,
6, CLARENCE ROAD,
NORWICH.

Cert. No: 94.I.
Lab No: 5072/W

2nd May, 1957.

CERTIFICATE OF ANALYSIS OF WATER

Sample received 23rd April, 1957 from Wayland R.D.C.

Marked - Pumping Station, Wretham.

Appearance when received - Clear; trace yellow deposit.

Nature of deposit - Iron compounds.

Colour - Nil	Odour - Nil.
Reaction - Neutral pH 7.3	Taste - Satisfactory.

RESULTS OF CHEMICAL ANALYSIS IN PARTS PER MILLION

Ammoniacal nitrogen	- 0.01	Hardness as $CaCO_3$:	
Albuminoid nitrogen	- 0.03	Total	- 255
Nitrate nitrogen	- 8.5	Carbonate (temporary)	- 185
Nitrite nitrogen	- Nil	Non-carbonate (permanent)	- 70
Chlorine as chlorides	- 18	Alkalinity as $CaCO_3$:	- 185

BACTERIOLOGICAL RESULTS

Number of colonies developing per ml. in 48 hrs at 37°C - 2

Presumptive coliform organisms - Probable No.per 100 ml.- Nil

B. Coli Type 1 ("Faecal")

OPINION

This water is of very good organic and bacteriological quality. The total hardness is approximately 18° Clark of which 5° is permanent. A trace of iron is present, giving rise to a slight rusty deposit on standing. In our opinion this water is fit for drinking and general purposes.

(Signed) Lincolne Sutton & Wood.

LINCOLNE SUTTON & WOOD.

CLARENCE HOUSE,
6, CLARENCE ROAD
NORWICH.

Cert. No: 93/I
Lab. No: 5071/W

2nd May, 1957.

CERTIFICATE OF ANALYSIS OF WATER

Sample received from Wayland R.D.C. on 23rd April 1957.

Marked - Pumping Station, Croxton.

Appearance when received - Clear.

Nature of deposit - Nil

Reaction - faintly alkaline pH 7.4

Colour - Nil.

Odour - Nil

Taste - Satisfactory.

RESULTS OF CHEMICAL ANALYSIS IN PARTS PER MILLION

Ammoniacal nitrogen - 0.01

Albuminoid nitrogen - 0.04

Nitrate nitrogen - 6.5

Nitrite nitrogen - practically nil.

Chlorine as chlorides - 12

Hardness as CaCO$_3$:

Total - 220

Carbonate (temporary) - 165

Non-carbonate (permanent) - 55

Alkalinity as CaCO$_3$: - 165

BACTERIOLOGICAL RESULTS

Number of colonies developing per ml. in 48 hrs at 37°C - Nil

Presumptive coliform organisms-Probable No. per 100 ml. - Nil

B. Coli Type 1 ("Faecal") - -

OPINION

The organic quality of this water is good and its bacteriological condition is excellent. The total hardness approximates to 15½° Clark, of which 4° is permanent. The remainder of the analysis calls for no special comment. In our opinion this water is fit for drinking purposes.

(Signed) Lincolne Sutton & Wood.

LINCOLNE SUTTON & WOOD.

CLARENCE HOUSE,
6, CLARENCE ROAD,
NORWICH.

Cert. No: 770.I.
Lab. No: 6145/W.

7th December, 1957.

CERTIFICATE OF ANALYSIS OF WATER

Sample received 20th November, 1957 from Wayland R.D.C.

Marked - New 24" Bore No.1 Riddlesworth.

Appearance when received - Clear.

Nature of deposit - Nil.

Colour - Nil.	Odour - Nil.
Reaction - faintly alkaline pH 7.5.	Taste - Satisfactory.

RESULTS OF CHEMICAL ANALYSIS IN PARTS PER MILLION

Ammoniacal nitrogen	- 0.01	Hardness as $CaCO_3$:	
Albuminoid nitrogen	- Negligible trace.	Total	- 290
Nitrate nitrogen	- Nil.	Carbonate (temporary)	- 245
Nitrite nitrogen	- practically nil.	Non-carbonate (permanent)	- 45
Chlorine as chlorides	- 26	Alkalinity as $CaCO_3$:	- 245
Oxygen absorbed (4 hrs., 27° C)	- 0.28	Free carbon dioxide	- 18
		Total solids(at 180°C)	- 370
		Iron (total)	- nil
		Metals in solution other than iron	- nil

BACTERIOLOGICAL RESULTS

Number of colonies developing per ml. in 48 hrs at 37°C - -

Presumptive coliform organisms - Probable No.per 100 ml. - -

B. Coli Type 1 ("Faecal")

OPINION

This water is of very good organic quality, and chemical analysis shows no sign whatever of pollution. The total hardness is above 20° Clark, and all but 3°of this is temporary. The free carbonic acid content is low, so that the reaction of the water is on the alkaline side of neutrality. This water would not be expected to have any serious corrosive action on metals. Metallic contamination was absent, and the appearance, odour and taste were all very satisfactory. In our opinion this water is suitable for drinking and general purposes.

(Signed) Lincolne Sutton & Wood.

M.G.M.SHORT
Waterworks Engineer.